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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,705	10/01/2003	Kelly M. Butler	D.1613	4599
7590	09/07/2006		EXAMINER	
John E. Toupal 116 Concord Street Framingham, MA 01702			QIN, JIANCHUN	
			ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/674,705

Applicant(s)

BUTLER, KELLY M.

Examiner

Jianchun Qin

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilson (U.S. Pub. No. 20020104428)

With respect to claim 1:

Wilson discloses a stringed instrument (Fig. 1) comprising: a body (12) having a front surface and a rear surface (Fig. 1); a tuning mechanism (16); a neck (14) having one end joined to said body and an opposite end retaining said tuning mechanism (Fig. 1); a retainer block encompassed by said rear surface (Fig. 3, the portion surrounding the opening in which the enlarged end of the string is engaged); a plurality of strings (24) each having a first end secured to said tuning mechanism (Fig. 1); and a second end retained by said retainer block (Fig. 3).

With respect to claim 2:

Wilson discloses: a bridge mounted on said front surface and wherein said strings extend from said tuning mechanism, over said bridge, and through said body to said block (Figs. 1 and 3).

3. Claims 3-5 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson in view of Cipriani (U.S. Pat. No. 4951543).

With respect to claims 3 and 4:

Wilson discloses the string instrument including the subject matter discussed above except: said retainer block has an inner surface and an outer surface and defines a plurality of channels extending between said inner and outer surface, and each of said strings having enlarged ends passes through a different one of said channels.

Cipriani teaches a stringed instrument (Fig. 1) comprising: a plurality of strings (4, 4', 4'') each having a first end secured to a tuning mechanism (1) and a second end retained by a retainer block (Fig. 4B, the plate embedded in the undersurface cross bar 20, upon which the enlarged end of the string is anchored); wherein said retainer block has an inner surface (the side touching the bar 20) and an outer surface (the side upon which the string is anchored) and defines a plurality of channels extending between said inner and outer surface, and each of said strings passes through a different one of said channels (Fig. 4B).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the retainer block of Cipriani in the invention of Wilson in order to provide a more effective reinforcing structure for attaching the strings to the body of the instrument (Cipriani, col. 5, lines 15-23).

With respect to claims 11 and 12:

The teaching of Wilson includes: said body (Fig. 1, element 12) defines a cavity (Fig. 3, the opening in which the enlarged end of the string is anchored) intersecting said rear surface (Figs. 1 and 3).

Wilson does not mention expressly: said cavity retaining said block; and said second ends are enlarged to prevent passage through said channels.

Cipriani teaches a stringed instrument (Fig. 1) comprising: a plurality of strings (4, 4', 4'') each having a first end secured to a tuning mechanism (1) and a second end retained by a retainer block (Fig. 4B, the plate embedded in the undersurface cross bar 20, upon which the enlarged end of the string is anchored); wherein said retainer block is unitary and embedded in a base member (Fig. 4B) and defines a plurality of channels, and each of said strings passes through a different one of said channels (Fig. 4B).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the retainer block of Cipriani in the invention of Wilson in order to provide a more effective reinforcing structure for attaching the stings to the body of the instrument (Cipriani, col. 5, lines 15-23).

With respect to claims 5 and 13:

Wilson teaches a plurality of channels (25) through which the strings pass and are fastened (Figs. 3 and 4; section 0023); wherein each of said channels comprises a counterbore (Fig. 3, the opening in which the enlarged end of the string is anchored) in the rear surface retaining one of said enlarged second ends.

4. Claims 6-10 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson in view of Cipriani, as applied to claim above and further in view of Kendall (U.S. Pat. No. 5260505).

With respect to claims 6 and 14:

Wilson in view of Cipriani teach the string instrument including the subject matter discussed above. Cipriani further teaches that said block is unitary (Fig. 4B, the plate embedded in the undersurface cross bar 20, upon which the enlarged end of the string is anchored).

Wilson in view of Cipriani do not mention expressly: said block is made of brass.

Kendall discloses a string retained for a stringed instrument wherein said string retainer is made of brass (col. 7, lines 19-28).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Kendall in the combination of Wilson and Cipriani in order to make the string retainer block more durable (Kendall, col. 7, lines 23-24).

With respect to claim 7:

The teaching of Wilson includes: a bridge mounted on said front surface and wherein said strings extend from said tuning mechanism, over said bridge, and through said body to said block (Figs. 1 and 3).

With respect to claims 8, 9, 15 and 16:

Wilson does not mention expressly: said retainer block has an inner surface and an outer surface and defines a plurality of channels extending between said inner and outer surface, and each of said strings having enlarged ends passes through a different one of said channels.

Cipriani teaches a stringed instrument (Fig. 1) comprising: a plurality of strings (4, 4', 4'') each having a first end secured to a tuning mechanism (1) and a second end

retained by a retainer block (Fig. 4B, the plate embedded in the undersurface cross bar 20, upon which the enlarged end of the string is anchored); wherein said retainer block has an inner surface (the side touching the bar 20) and an outer surface (the side upon which the string is anchored) and defines a plurality of channels extending between said inner and outer surface, and each of said strings passes through a different one of said channels (Fig. 4B).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the retainer block of Cipriani in the invention of Wilson in order to provide a more effective reinforcing structure for attaching the stings to the body of the instrument (Cipriani, col. 5, lines 15-23).

With respect to claim 10:

Wilson teaches a plurality of channels (25) through which the strings pass and are fastened (Figs. 3 and 4; section 0023); wherein each of said channels comprises a counterbore (Fig. 3, the opening in which the enlarged end of the string is anchored) in the rear surface retaining one of said enlarged second ends.

#### ***Contact Information***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianchun Qin whose telephone number is (571) 272-5981. The examiner can normally be reached on 8am - 5:30pm.

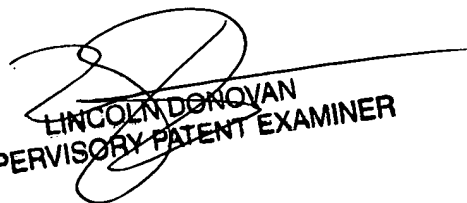
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jianchun Qin  
Examiner  
Art Unit 2837

JQ



LINCOLN DONOVAN  
SUPERVISORY PATENT EXAMINER